

## AMENDMENTS TO THE CLAIMS

Kindly add newly presented claims 30-38 as shown in the listing of claims below.

- 1 30. A multilayer optical fiber coupler, comprising:  
2     a first layer, said first layer having one or more fiber sockets formed by photolithographic  
3     masking and deep reactive ion etching to extend through said first layer, said fiber socket  
4     sized to receive and align an optical fiber therein.
- 1 31. The optical fiber coupler of claim 30 wherein said one or more fiber sockets include two or  
2     more fiber sockets.
- 1 32. The optical fiber coupler of claim 30, further comprising a second layer affixed to said first  
2     layer.
- 1 33. The optical fiber coupler of claim 32 wherein said optical fiber has an end section that  
2     extends through said fiber socket.
- 1 34. A method for making a plurality of monolithic optical fiber couplers that align an optical  
2     fiber that have a predetermined diameter, comprising:  
3     photolithographically masking and deep reactive ion etching a first layer to form a plurality  
4     of through holes through the first layer, thereby forming a plurality of cylindrical fiber  
5     sockets in a predetermined configuration, said fiber sockets having a diameter approximately  
6     equal to the diameter of the optical fiber.
- 1 35. The method of claim 34, further comprising affixing optical fibers into said fiber sockets.
- 1 36. The method of claim 34, further comprising dicing said first layer into a plurality of chips,  
2     said chip including one or more fiber sockets.
- 1 37. The method of claim 34, further comprising affixing said first layer to a second layer together  
2     to provide a composite wafer.
- 1 38. The method of claim 37, further comprising dicing said composite wafer into a plurality of  
2     chips, said chip including one or more fiber sockets.